



**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
George Barrie Kitto  
Marry Susan Burnett

Serial No.: 09/244,195

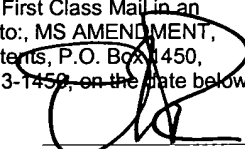
Filed: February 4, 1999

For: LIVE VACCINE FOR HUMAN  
IMMUNODEFICIENCY VIRUS

Group Art Unit: 1648

Examiner: Jeffrey S. Parkin

Atty. Dkt. No.: CLFR:167US

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MS AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:	
May 25, 2005	
Date	David L. Parker

**INFORMATION DISCLOSURE STATEMENT**

**MS AMENDMENT**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

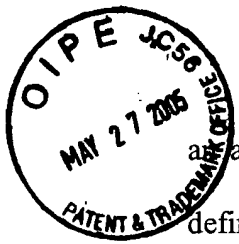
In accordance with 37 C.F.R §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be

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an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed herewith.

If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fee from Fulbright & Jaworski Account No.: 50-1212/CLFR:167US.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

David L. Parker  
Reg. No. 32,165  
Attorney for Applicants

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Date: May 25, 2005

Form PTO-1449 (modified)

Atty. Docket No.  
CLFR:167USSerial No.  
09/244,195

Office of Patents and Publications for Applicant's

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant  
George Barrie Kitto  
Marry Susan BurnettFiling Date:  
February 4, 1999Group:  
1648U.S. Patent Documents  
*See Page 1*Foreign Patent Documents  
*See Page 1*Other Art  
*See Page 1*

## U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	4,757,013	7/12/88	Inouye <i>et al.</i>	435	172.3	6/26/86

## Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 92/11028	7/9/92	WIPO			English
	B2	WO 96/11708	4/25/96	WIPO			English

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Berggren <i>et al.</i> , "HIV gp120-specific cell-mediated immune responses in mice after oral immunization with recombinant Salmonella," <i>J. Acquir. Immun. Defic. Syndr. Hum Retrovirol.</i> 10:489-495, 1995.
	C2	Bende and Johnston, "Update: search for an AIDS vaccine," <i>AIDS reader</i> , September, 526-538, 2000.
	C3	Burnett <i>et al.</i> , "Potential live vaccines for HIV," <i>Vaccine</i> , 19:735-742, 2000.
	C4	Burton and Moore, "Why do we not have an HIV vaccine and how can we make one?," <i>Nat. Med.</i> , 4(5):495-498, 1998.
	C5	Feinberg, and Moore, "AIDS vaccine models: challenging challenge viruses," <i>Nat. Med.</i> 8(3):207-210, 2002.
	C6	Ferns <i>et al.</i> , "Monoclonal antibodies define linear and conformational epitopes of HIV-1 pol gene products," <i>AIDS Res. Human Retrovir.</i> , 7(3):307-313, 1991.
	C7	Francisco <i>et al.</i> , "Transport and anchoring of beta-lactamase to the external surface of Escherichia coli," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 89:2713-2717, 1992.
	C8	Georgiou <i>et al.</i> , "Display of heterologous proteins on the surface of microorganisms: from the screening of combinatorial libraries to live recombinant vaccines," <i>Nature Biotech.</i> 15:29-34, 1997.

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EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.



Form PTO-1449 (modified)		Atty. Docket No. CLFR:167US	Serial No. 09/244,195
List of Patents and Publications for Applicant's  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		Applicant George Barrie Kitto Marry Susan Burnett	
		Filing Date: February 4, 1999	Group: 1648
U.S. Patent Documents See Page 1	Foreign Patent Documents See Page 1	Other Art See Page 1	

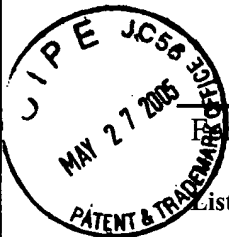
**Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C9	Haynes, "HIV vaccines: where we are and where we are going," <i>Lancet</i> 348:933-937, 1996.
	C10	Hinkula <i>et al.</i> , "Recognition of prominent viral epitopes induced by immunization with human immunodeficiency virus type 1 regulatory genes," <i>J. Virol.</i> 71(7):5528-5539, 1997.
	C11	Hoth <i>et al.</i> , "HIV vaccine development: a progress report," <i>Ann. Int. Med.</i> , 8(7):603-611.
	C12	Johnston, "The role of nonhuman primate models in AIDS vaccine development," <i>Mol. Med.</i> , 6:267-270, 2000.
	C13	Kent <i>et al.</i> , "Antagonism of vaccine-induced HIV-1-specific CD4+ T cells by primary HIV-1 infection: potential mechanism of vaccine failure," <i>J. Immunol.</i> 158:807-815, 1997.
	C14	Letvin, "Progress in the development of an HIV_1 vaccine," <i>Science</i> 280:1875-1880, 1998.
	C15	Michel <i>et al.</i> , "Recombinant hepatitis B surface antigen as a carrier of human immunodeficiency virus epitopes," <i>Res. Virol.</i> 144:263-267, 1993.
	C16	Moore and Burton, "HIV-1 neutralizing antibodies: how full is the bottle?," <i>Nat. Med.</i> , 5(2):142-144, 1999.
	C17	Nathanson and Mathieson, "Biological considerations in the development of a human immunodeficiency virus vaccine," <i>J. Infect. Dis.</i> , 182:579-589, 2000.
	C18	O'Callaghan <i>et al.</i> , "High efficiency transformation of <i>Salmonella typhimurium</i> and <i>Salmonella typhi</i> by electroporation," <i>Mol. Gen. Genet.</i> , 223:156-158, 1990.
	C19	Richins <i>et al.</i> , "Biodegradation of organophosphorus pesticides by surface-expressed organophosphorus hydrolase," <i>Nat. Biotech.</i> , 15:984-987, 1997.
	C20	Silver and Gupta, "Turning poison eaters inside out," <i>Nat. Biotech.</i> , 15:953, 1997.
	C21	Stabel <i>et al.</i> , "Oral immunization of mice and swine with an attenuated <i>Salmonella choleraesuis</i> [delta cya-12 delta(crp-cdt)19] mutant containing a recombinant plasmid," <i>Infect. Immun.</i> , 61:610-618, 1993.
	C22	Stott and Almond, "Assessing animal models of AIDS," <i>Nat. Med.</i> 1(4):295-297, 1995.
	C23	Turner <i>et al.</i> , "Expression of <i>Chlamydia psittaci</i> - and human immunodeficiency virus-derived antigens on the cell surface of <i>Lactobacillus fermentum</i> BR11 as fusions to bspA," <i>Infect. Immune.</i> , 67:5486-5489, 1999.

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**Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C24	Walker <i>et al.</i> , "HIV-1 reverse transcriptase is a target for cytotoxic T lymphocytes in infected individuals," <i>Science</i> , 240(4848):64-66, 1988.
	C25	Walker <i>et al.</i> , "Long-term culture and fine specificity of human cytotoxic T-lymphocyte clones reactive with human immunodeficiency virus type 1," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 86(23):9514-9518, 1989.

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# PIPE TRANSMITTAL FORM

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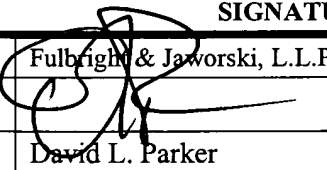
Application Number: 09/244,195  
 Filing Date: February 4, 1999  
 First Named Inventor: George Barrie Kitto  
 Art Unit: 1648  
 Examiner Name: Jeffrey S. Parkin  
 Attorney Docket Number: CLFR:167US

## ENCLOSURES (check all that apply)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input checked="" type="checkbox"/> Form PTO-1449<br><input checked="" type="checkbox"/> References A1, B1-B2, C1-C25<br><input type="checkbox"/> Certified Copy of Priority Documents<br><input type="checkbox"/> Reply to Missing Parts/<br>Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts<br>under 37 CFR 1.52 or 1.53<br><input type="checkbox"/> Declaration(s) _____<br><input type="checkbox"/> Copy of Notice of Missing Parts | <input type="checkbox"/> Drawings(s) _____<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional<br>Application<br><input type="checkbox"/> Power of Attorney, Revocation,<br>Change of Correspondence<br>Address<br><input type="checkbox"/> Statement under 37 CFR §3.73(b)<br><input type="checkbox"/> Designation of Patent Practitioners<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of<br>Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC<br>(Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below)<br><input checked="" type="checkbox"/> Check in the amount of \$180.00<br><input checked="" type="checkbox"/> Authorized to be charged to deposit account<br>if check insufficient or inadvertently omitted<br>Deposit account number: <u>50-1212/CLFR:167US</u><br><input type="checkbox"/> Sequence Statement<br><input type="checkbox"/> Paper Copy of Sequence Listing<br><input type="checkbox"/> Computer Readable Form (CRF)<br><input checked="" type="checkbox"/> Postcard<br><input type="checkbox"/> _____<br><input type="checkbox"/> _____ |
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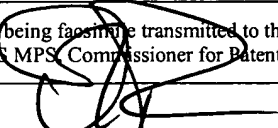
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## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Fulbright & Jaworski, L.L.P.	Customer Number	32425
Signature			
Printed Name	David L. Parker	Reg. No.	32,165
Date	May 25, 2005		

## CERTIFICATE OF TRANSMISSION/MAILING

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Signature			
Typed or Printed Name	David L. Parker	Date	May 25, 2005